

Docket No.: DRESSEL
 Appl. No.: 10/067,695

REMARKS

The last Office Action of November 25, 2003 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 14-18 and 23-35 are pending in the application. Claims 15 and 33 has been amended. No Fee is due.

Claims 14-18, 23-27, 31 and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 4,709,180 to Denk (hereinafter "Denk '180") in view of U.S. Pat. No. 4,912,353 to Kondo et al and further in view of U.S. Pat. No. 6,157,159 to Schiferl et al.

Claims 28-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Denk and U.S. Pat. No. 2,711,008 to Smith in view of 4,968,911 to Denk (hereinafter "Denk '911").

Claims 24-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Denk '180 in view of Kondo et al and Schiferl et al and further in view of Swiss Pat. No. 587,575 (hereinafter "Swiss reference").

It is noted with appreciation that claims 33-35 are indicated allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Applicant has rewritten previously added claim 33 in independent form, as suggested by the Examiner, who indicated that claim 33 would be allowable if rewritten in independent form. Although claim 33 was previously dependent on

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claim 32, the subject matter of claim 32 has not been entirely incorporated because the reference to a "closed" cylinder surface contradicts the subject matter of claim 33. It is applicant's belief that claim 33 has not been narrowed to trigger prosecution history estoppel.

The rejection under 35 U.S.C. 103(a) of claim 14 and all claims that are dependent on claim 14 is, however, respectfully traversed.

The present invention, as set forth in claim 14, is directed to an electric machine having a fastening apparatus for securing a winding assembly disposed in an air gap between a stator yoke and a rotor, whereby the fastening apparatus includes a main body which is formed with a plurality of webs that extend out for engagement in complementary recesses in the stator yoke and is made of insulating non-magnetic material.

The Denk '180 reference describes a stator for use with a permanent magnet rotor and uses a winding support having a cylindrical portion with radially outwardly extending longitudinal support fins (48 or 82). Mounted about the outer periphery of the winding structure and extending around the outermost edges of the support fins is a cylindrical flux collector ring (stator yoke). As is clearly shown in Figs. 4 or 7, and acknowledged by the Examiner, Denk fails to teach or suggest an engagement of the fins in the collector ring, and fails to teach or suggest a construction of the collector ring which is long enough in axial direction to extend over the ends of the winding structure.

The Examiner combines Denk '180 with Kondo et al. and Schiferl et al. More specifically, the Examiner noted that "*Kondo teaches an electric machine*

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(figure 1-2) having a stator core (1), webs (2) wherein the webs [sic] with at least partial engagement in complementary recesses in the stator yoke (figure 3)". While Kondo et al. does indeed describe such an engagement, it is applicant's contention that a person skilled in the art would not consider the Kondo et al. reference when attempting to solve the problems addressed by the present invention. As stated above, the present invention is directed to an air gap winding whereby the stator yoke is generally made of a ferromagnetic material, whereas the main body of the fastening apparatus is made of non-magnetic material. Thus, the present invention is directed to an interconnection of two different materials. In contrast thereto, Kondo et al. does not relate to an air gap winding and does only teach the connection between two parts that are made of same material, namely the inner iron core and the outer iron core (see e.g. col. 1, lines 48, 49).

The fact that individual elements of the present invention can be found in the Kondo et al. reference is not determinative as to the question of obviousness. As stated by the Federal Circuit in *In re Rouffet*, 47 USPQ2d, 1453, 1457 "Most, if not all, inventions are combinations and mostly of old element. Therefore, an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue.". Thus, there must be some motivation to combine the references to create the case of obviousness, and a showing that a skilled artisan, confronted with the problems as the inventor, would select the elements from the cited prior art references. In the case at hand,

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it is applicant's contention, that the Examiner failed to explain the motivation one with no knowledge of applicant's invention would have to combine the references in a manner suggested.

The Schiferl et al. reference has been applied to show the configuration of the stator yoke to extend over the winding overhangs.

For the reasons set forth above, it is applicant's contention that neither Denk '180 nor Kondo et al., nor Schiferl et al., nor any combination thereof teaches or suggests the features of the present invention, as recited in claim 14.

As for the rejection of the retained dependent claims, these claims depend on claim 14, share its presumably allowable features, and therefore it is respectfully submitted that these claims should also be allowed.

It should, however, be noted that these dependent claims contain individual patentable features per se. In this connection, applicant wishes to refer e.g. to claim 15 which has been amended to set forth the provision of axial cooling channels between the stator yoke and the bandage. Support therefore can be found in paragraph [0034] of the instant specification. Also claim 16 sets forth the provision of axial cooling channels. While Schiferl et al. show a coating (122) to wrap the end winding portions, Schiferl et al. fails to teach or suggest the possibility to provide such cooling channels.

With respect to the subject matter of claim 16, the Examiner applied the Denk '180 reference and opined that Denk '180 teaches the provision of "*axial cooling channels between the stator yoke and the winding assembly*". Applicant respectfully disagrees. Fig. 7 to which the Examiner made reference in this

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context does not describe any cooling channels. Rather, the area designated by reference numeral 91 (Fig. 7A) relates to the provision of an insulating liner (see col. 8, lines 50, 51).

Withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of claims 14-18 and 23-35 are thus respectfully requested.

In view of the above presented remarks and amendments, it is respectfully submitted that all claims on file should be considered patentably differentiated over the art and should be allowed.

Reconsideration and allowance of the present application are respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,

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